

CLAIMS

What is claimed is:

1. A method for performing diagnostics on a computer peripheral device,
5 said method comprising:
coupling a computer comprising a web browser to a backend server via a communication link;
via a peripheral device coupled to said computer and comprising a web server,
constructing and sending a peripheral device HTTP message to said web browser comprising peripheral device functionality information;
10 via said web browser, forwarding said peripheral device HTTP message to said backend server;
via said backend server, and in response to receiving said peripheral device HTTP message, constructing and transmitting a directive web page to said peripheral device requesting more information if more information is needed, or a constructing and transmitting a human readable web page to said web browser, indicating diagnostic results if
15 more information is not needed;
via said web server, automatically responding to a directive web page with a new peripheral device HTTP message comprising functionality information; and
20 iteratively communicating between said backend server and said peripheral device is until a user communication point is reached, which communication point precedes transmitting said human readable web page.

2. The method of Claim 1, wherein said peripheral device is an image reproduction device.

3. The method of Claim 2, wherein said image reproduction device is a printer.

5 4. The method of Claim 1, further comprising, via a PostScript function interface, generating said peripheral device functionality information in response to a call from said web server.

5. The method of Claim 1, wherein said communication link comprises the World Wide Web.

10 6. A method for performing diagnostics on a computer peripheral device, said method comprising:

coupling a computer comprising a web browser to a backend server via a communication link;

via a peripheral device coupled to said computer and comprising a web server,
15 constructing and sending a peripheral device HTTP message to said web browser comprising peripheral device functionality information;

via said web browser, forwarding said peripheral device HTTP message to said backend server;

via said backend server, and in response to receiving said peripheral device HTTP
20 message, constructing and transmitting a directive web page to said peripheral device requesting more information if more information is needed, or a constructing and transmit-

ting a human readable web page to said web browser, indicating diagnostic results if more information is not needed;

via said web server, automatically responding to a directive web page with a new peripheral device HTTP message comprising functionality information;

5 iteratively communicating between said backend server and said peripheral device is until a user communication point is reached, which communication point precedes transmitting said human readable web page; and

via a rules-based diagnostic database subsumed by said backend server, constructing and transmitting iterative responses to peripheral HTTP messages.

10 7. The method of Claim 1, further comprising, in response to code in said redirect web pages, said peripheral device executing said code to manipulate features of said peripheral device.

8. The method of Claim 1, wherein said diagnostic results comprise a user executable solution to a problem experienced by said peripheral device.

15 9. The method of Claim 1, wherein said diagnostic results comprise a solution to a problem experienced by said peripheral device which can be remedied by replacing a user-replaceable peripheral device component.

10. The method of Claim 1, wherein said web pages utilize Hyper Text Markup Language (HTML).

20 11. The method of Claim 1, wherein said peripheral device functionality information comprises data in Extensible Markup Language (XML) format.

12. A system for performing diagnostics on a computer peripheral device, said system comprising:

a backend server;

a computer comprising a web browser;

5 a communication link coupled between said computer and said backend server;

and

a peripheral device coupled to said computer and comprising a web server, said web server adapted to construct and send a peripheral device HTTP message to said web browser comprising peripheral device functionality information;

10 wherein said web browser is adapted to forward said peripheral device HTTP message to said backend server, and said backend server is adapted to, in response to receiving said peripheral device HTTP message, construct and transmit a directive web page to said peripheral device requesting more information if more information is needed, or a human readable web page to said web browser, indicating diagnostic results
15 if more information is not needed, and said web server is adapted to automatically respond to a directive web page with a new peripheral device HTTP message comprising functionality information, and the communication between said backend server and said peripheral device is iterative until a user communication point is reached, which communication point precedes transmitting said human readable web page.

20 13. The system of Claim 12, wherein said peripheral device is an image reproduction device.

14. The system of Claim 13, wherein said image reproduction device is a printer.

15. The system of Claim 12, wherein said peripheral device further comprises a PostScript function interface adapted to generate said peripheral device functionality
5 information in response to a call from said web server.

16. The system of Claim 12, wherein said communication link comprises the World Wide Web.

17. The system of Claim 12, wherein said backend server comprises a rules-based diagnostic database adapted to indicate iterative responses to peripheral device
10 HTTP messages.

18. The system of Claim 12, wherein said redirect web pages comprise code executable by said peripheral device to manipulate features of said peripheral device.

19. The system of Claim 12, wherein said diagnostic results comprise a user executable solution to a problem experienced by said peripheral device.

15 20. The system of Claim 12, wherein said diagnostic results comprise a solution to a problem experienced by said peripheral device which can be remedied by replacing a user-replaceable peripheral device component.

21. The system of Claim 12, wherein said web pages utilize Hyper Text Markup Language (HTML).

20 22. The system of Claim 12, wherein said peripheral device functionality information comprises data in Extensible Markup Language (XML) format.